

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.: 10/596237
APPLICANT : Golz-Berner et al
FILED : June 5, 2006
FOR : COSMETIC AND DERMATOLOGICAL OXYGEN CARRIER
SYSTEM
ART UNIT : 1811
EXAMINER : Buckley

DECLARATION UNDER 37 C.F.R. § 1.132

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

I, Karin Golz-Berner, hereby declare as follows:


I am a named co-inventor in the above-referenced application.

I submit this declaration in support of the above-referenced application.

I requested and oversaw the conducting of the experiments set forth in detail as attached hereto, and have reviewed the results in detail. I verify that the results are true and accurate.

All statements made herein on knowledge are true, and all statements made on information and belief are believed to be true; and further these statements were made with the knowledge that willful false statement and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

February 12, 2010


Karin Golz-Berner

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US 10/596,237**Comparative tests****TEST 1: with silicone oils/silicone polymers**

Composition in percent by weight:

(A) Dimethicone	22
(B) Trifluoromethyl C1-4 Alkyl Dimethicone	32
(C) Perfluorodecalin	8.5
(D) Dimethicone/Vinyldimethicone Crosspolymer	
(and) Cl2-14 Pareth-12	27
(F) Water	10.5

While stirring, the relevant amount of (B) is slowly added to (A) at ambient temperature, and stirring is continued for a few minutes. While stirring, (C) is added, and stirring is continued for about 20 to 30 minutes. Thereafter, (D) is successively added while also slowly stirring, then (F). The mixture is homogenised at about 2,500 r.p.m. for 50 seconds. All steps were carried out at about 22 - 25°C.

Thereafter, gaseous oxygen with 600 mbar is bubbled through the mixture for 55 minutes while stirring at 280 r.p.m. The obtained oxygen contents are measured with an Oxi 3000 (WTW GmbH, Weilheim, Germany).

With the prepared carrier system a Body Foam (Mousse) was produced with the following ingredients :

Water	up to 100 %
Squalane	0.01
Butylene Glycol	2.0
Glycerol	2.0
PPG-5 Ceteth-20	1.0
Decyl Glucoside	3.0
O ₂ carrier system (above); 400 mbar O ₂	9.0
Silicone Oil	6.0

The constituents were mixed at ambient temperature in the order as stated above and then transferred into a pump bottle with a special pump for mousse. The O₂ concentration after six weeks is 28 Vol-% of the initial concentration.

TEST 2: without silicone oils/silicone polymers

Composition in percent by weight:

(A) Dicapryl Carbonate	7.5
(B) Versagel ® ME 1600	35
(C) Perfluorodecalin	8.5
(D) Jojoba Oil	16
(E) Bentone Gel	33

While stirring, the relevant amounts of (A) and (D) are added to (B) at ambient temperature, and stirring is continued for a few minutes. While stirring, (C) is added, and stirring is continued for about 25 minutes. Thereafter, (D) is successively added while also slowly stirring. The mixture is homogenised at about 2,500 r.p.m. for 50 seconds. All steps were carried out at about 22 - 25°C.

Thereafter, gaseous oxygen with 600 mbar is bubbled through the mixture for 55 minutes while stirring at 280 r.p.m. The obtained oxygen contents are measured with an Oxi 3000 (WTW GmbH, Weilheim, Germany).

With the prepared carrier system a Body Foam (Mousse) was produced with the following ingredients :

Water	up to 100 %
Squalane	0.01
Butylene Glycol	2.0
Glycerol	2.0
PPG-5 Ceteth-20	1.0
Decyl Glucoside	3.0
O ₂ carrier system (above); 400 mbar O ₂	9.0
Mineral Oil	6.0

The constituents were mixed at ambient temperature in the order as stated above and then transferred into a pump bottle with a special pump for mousse. The O₂ concentration after six weeks is 4 Vol-% of the initial concentration.

Test 2 shows a significant lower O₂ content than test 1 of the inventive composition.

The same results with high O₂ contents after 6 weeks show the following new examples with a body foam (examples 9 and 11) and a self tanning agent (examples 10 and 12).

Example 9 Preparation of the oxygen carrier system (SiOx III) on an aqueous base

Composition in percent by weight:

(A) Dimethicone	22
(B) Trifluoromethyl C1-4 Alkyl Dimethicone	35
(C) Perfluorodecalin	5.5
(D) Dimethicone/Vinyldimethicone Crosspolymer	
(and) C12-14 Pareth-12	27
(F) Water	10.5

While stirring, the relevant amount of (B) is slowly added to (A) at ambient temperature, and stirring is continued for a few minutes. While stirring, (C) is added, and stirring is continued for about 20 to 30 minutes. Thereafter, (D) is successively added while also slowly stirring, then (F). The mixture is homogenised at about 2,500 r.p.m. for 50 seconds. All steps were carried out at about 22 - 25°C.

Thereafter, gaseous oxygen with 500 mbar is bubbled through the mixture for 45 minutes while stirring at 280 r.p.m. The obtained oxygen contents are measured with an Oxi 3000 (WTW GmbH, Weilheim, Germany).

Example 10 Preparation of the oxygen carrier system (SiOx IV) on an oil base

Composition in percent by weight:

(A) Cyclopentasiloxane	10
(B) Dicapryl Carbonate	10
(C) Perfluoromethylcyclopentane	3
(D) Hydrogenated Polyisobutene (and)	
Ethylene/Propylene/Styrene Copolymer (and)	

Butylene/-Ethylene/-Styrene Copolymer	
(Versagel® ME1600)	38
(E) Bentone Gel	39

While stirring at 400 to 500 r.p.m., the relevant amount of (B) is slowly added to (A), and stirring is continued for a few minutes. (C) is added at 900 to 1,000 r.p.m., and stirring is continued for about 20 to 30 minutes. Thereafter, (D) is added, then (E). The mixture is homogenised at about 2,700 to 2,800 r.p.m. for 40 seconds. All steps were carried out at about 22 - 25°C.

Thereafter, gaseous oxygen with 520 mbar is bubbled through the mixture for 50 minutes while stirring at 300 r.p.m.

Example 11 Body Foam (Mousse)

Water	up to 100 %
Squalane	0.01
Butylene Glycol	2.0
Glycerol	2.0
PPG-5 Ceteth-20	1.0
Decyl Glucoside	3.0
SiOx III of Example 9; 370 mbar O ₂	4.5
Silicone Oil	6.0

The constituents were mixed at ambient temperature in the order as stated above and then transferred into a pump bottle with a special pump for mousse. The O₂ concentration after six weeks is 24 Vol-% of the initial concentration.

Example 12 Self-Tanning Agent III O/W

Phase A

Water	up to 100 %
Dihydroxyacetone	4.5
Glycerol	2.0

Phase B

Dimethicone	6.0
Dimethicone/Vinyldimethicone Crosspolymer	
(and) CI2-14 Pareth-12	25

Cyclopentasiloxane Dimethiconol	2.0
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Octyldodecyl Stearoyl Stearate	2.5
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Phase C

Preservative	0.5
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Phase D

SiO _x IV of Example 10; 390 mbar O ₂	8
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The O₂ concentration after six weeks is 29 Vol-% of the initial concentration.